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**United States Patent** [19][11] **Patent Number:** **5,460,688****DiSanto et al.**[45] **Date of Patent:** \* **Oct. 24, 1995**[54] **DUAL ANODE FLAT PANEL  
ELECTROPHORETIC DISPLAY APPARATUS**[58] **Field of Search** ..... 156/657, 655,  
156/656, 643; 359/296; 340/787[75] **Inventors:** **Frank J. DiSanto**, North Hills; **Denis  
A. Krusos**, Lloyd Harbor, both of N.Y.[56] **References Cited****U.S. PATENT DOCUMENTS**[73] **Assignee:** **Copytele, Inc.**, Huntington Station,  
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5,302,235 4/1994 DiSanto et al. .... 156/643

[\*] **Notice:** The portion of the term of this patent  
subsequent to Oct. 1, 2008 has been dis-  
claimed.*Primary Examiner*—Thi Dang*Attorney, Agent, or Firm*—Plevy & Associates[57] **ABSTRACT**

An electrophoretic display has a grid cathode matrix arrangement consisting of a first plurality of parallel conductive lines insulated from a second plurality of parallel conductive lines transverse to said first plurality. Located with respect to the grid and cathode lines are first and second anode structures. The first anode is remote from the second with the second anode overlying the grid lines of the display and insulated therefrom. The second anode is biased to implement typical HOLD and ERASE modes independent of the first anode.

[21] **Appl. No.:** **58,532**[22] **Filed:** **May 5, 1993****Related U.S. Application Data**

[63] Continuation of Ser. No. 719,021, Jun. 21, 1991, Pat. No. 5,302,235, which is a continuation-in-part of Ser. No. 345,825, May 1, 1989, Pat. No. 5,053,763.

[51] **Int. Cl.<sup>6</sup>** ..... **G09G 3/34**[52] **U.S. Cl.** ..... **216/5; 216/67****7 Claims, 1 Drawing Sheet**